

A REDEFINITION OF *DISDERIA* AND ADDITION OF  
A NEW SPECIES (HEMIPTERA: PENTATOMIDAE)

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*Abstract.*—The genus *Disderia* is redefined and a new species from Oaxaca, Mexico, added. Parts of the male genitalia of the three known species and the genital plates of the females of *D. decorata* and *D. inornata* are figured. A key to the species is given.

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Bergroth (1910) established the genus *Disderia* for *Phalaeceus decoratus* Distant, and Ruckes (1959) added *D. inornata*. A third species is described here and additional details are given concerning the genitalia of the other 2 species. The genus is redefined to broaden and augment the original description.

Among the Pentatomini of the Western Hemisphere, *Disderia* may be recognized by the combination of 3-segmented tarsi and a grossly elongated abdominal spine which reaches the procoxae.

*Disderia* Bergroth, 1910

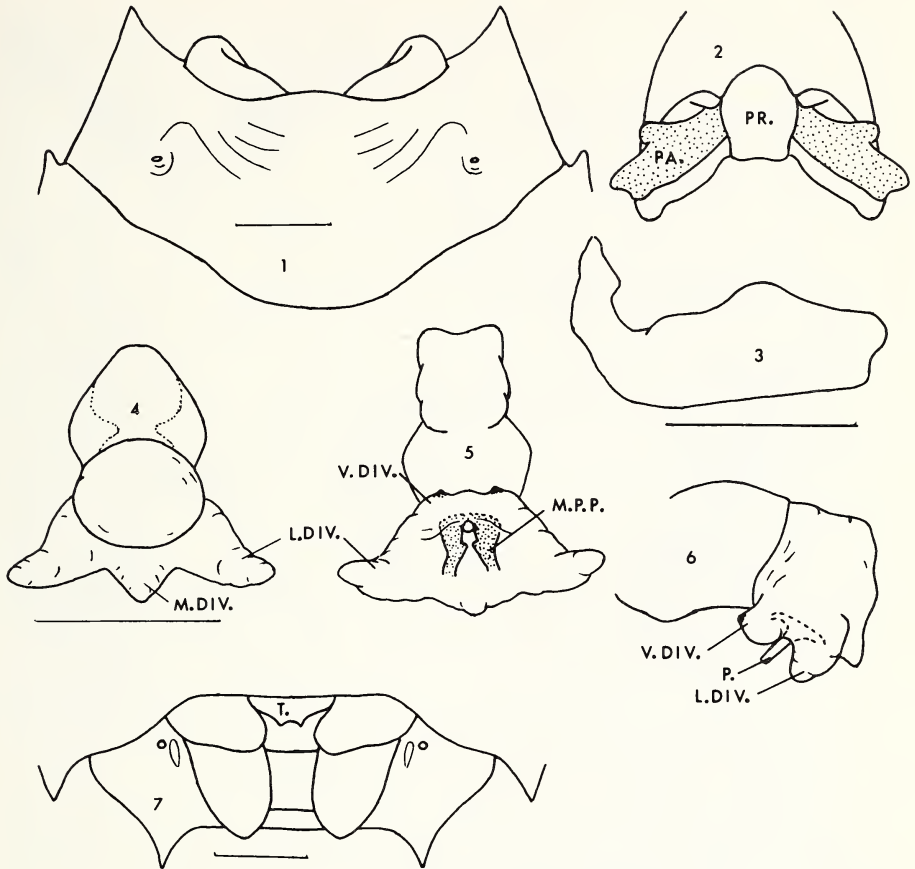
*Disderia* Bergroth, 1910, p. 20; Distant, 1911, p. 252; Ruckes, 1959, p. 27.

Median basal spine of abdomen reaching procoxae, depressed basally, compressed distally. Ostiolar rugae straight, extending about three-fourths of distance from inner margin of ostiole to lateral margin of metapleuron. Mesosternum and metasternum anteriorly with low median carina. Femora without apical spine or other armament. Tarsi three-segmented.

Length of head about 0.7 width across eyes; juga narrowly contiguous or nearly so at apex of head (Fig. 14); distal end of first antennal segment surpassing apex of head; bucculae evanescent at base of head, terminating near distal end of first rostral segment; apex of rostrum reaching between mesocoxae. Pronotum about 2.5 times wider than long at meson; anterior margin contiguous with and projecting a little laterad of eyes; anterolateral margins entire. Scutellum 0.1–0.2 longer than wide at base; frena extending about 0.6 length of scutellum from base toward apex.

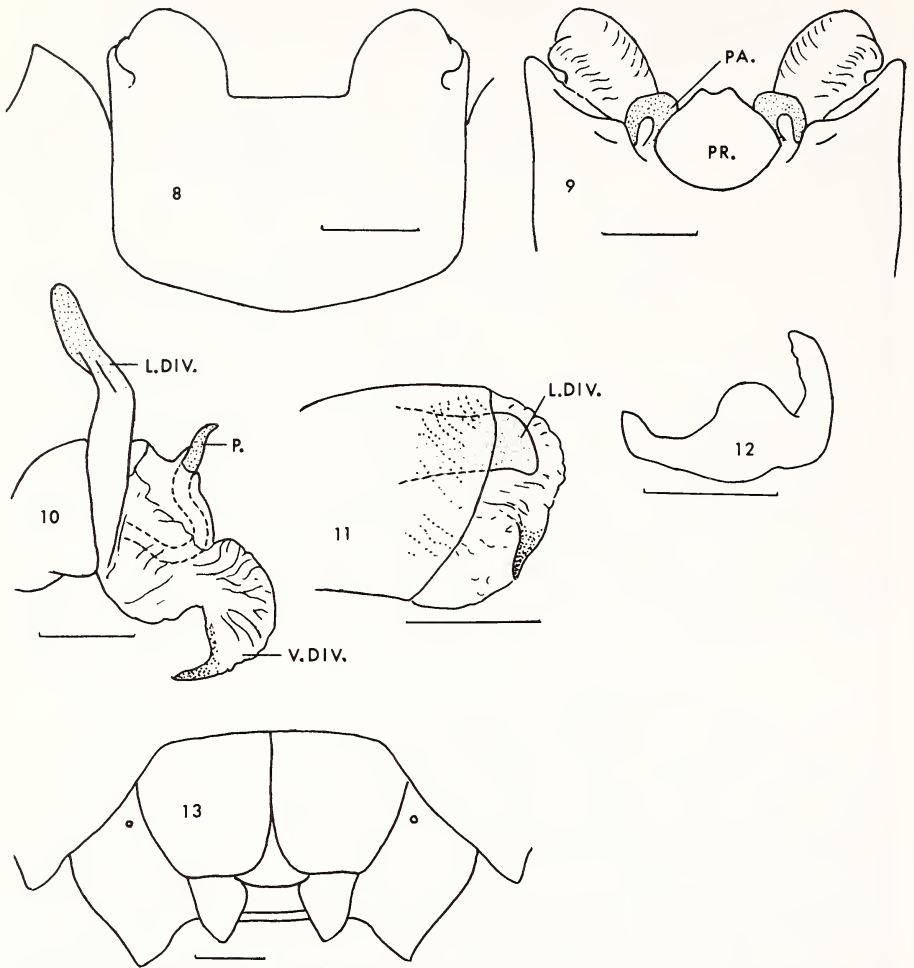
Theca of male genitalia without processes on apical margin. Eighth paratergites of female and 8th sternite of males bearing spiracles.

*Type species.* *Phalaeceus decoratus* Distant by original designation.



Figs. 1-7. *D. decorata*. 1. Pygophore and last abdominal segment, ventral view. 2. Genital cup; paramere (PA); proctiger (PR). 3. Paramere, ventral view. 4. Aedeagus, dorsal view; lateral diverticula (L. DIV.); median diverticulum (M. DIV.). 5. Aedeagus, ventral view; lateral diverticula (L. DIV.); ventral diverticula (V. DIV.); median penial plates (M. P. P.). 6. Aedeagus, lateral view; lateral diverticula (L. DIV.); ventral diverticula (V. DIV.); penisfilum (P.). 7. Genital plates; triangulum (T.).

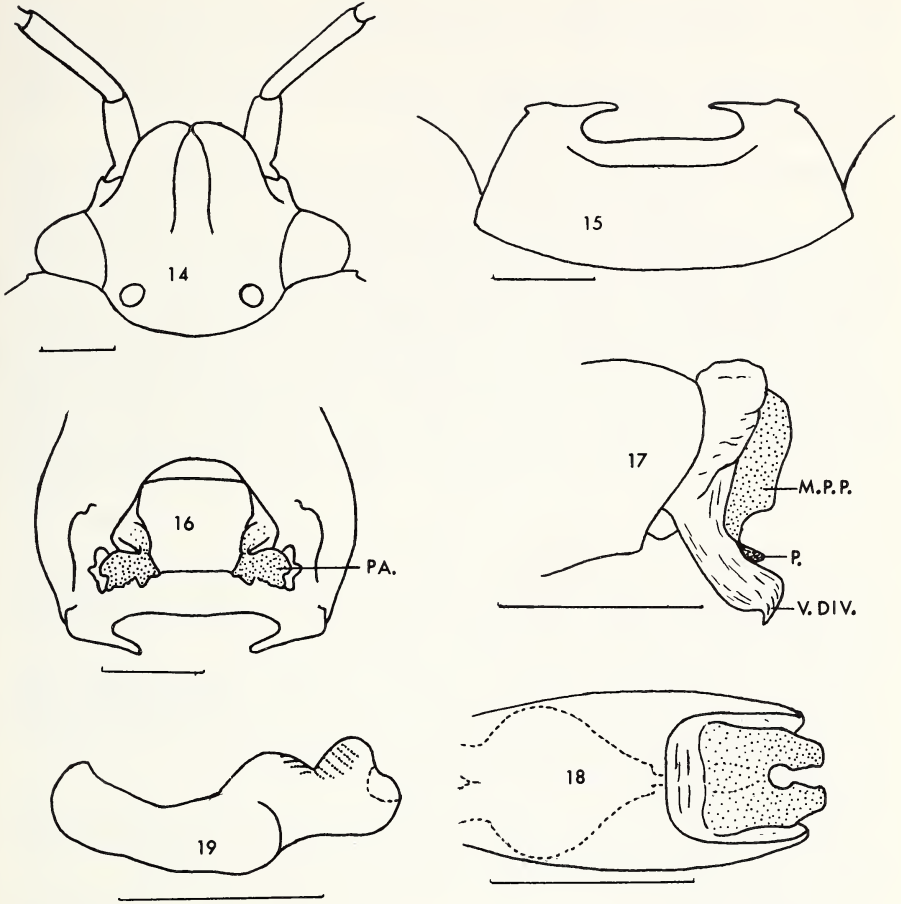
*Comment.* Perhaps it should be emphasized, because of conflicting statements, that Distant (1880) was correct in describing the mesosternum and metasternum as elevated (p. 83), although Bergroth (1910) may also have been correct in his belief that Distant mistook the abdominal spine for sterna. In all 3 species the mesosternum and anterior portion of the metasternum have a low median carina which is generally rather obscured by the abdominal spine.



Figs. 8-13. *D. inornata*. 8. Pygophore, ventral view. 9. Genital cup; parameres (PA); procotiger (PR). 10. Aedeagus, everted, lateral view; lateral diverticula (L. DIV.); ventral diverticulum (V. DIV.); penisfilum (P). 11. Aedeagus, uneverted; lateral diverticula (L. DIV.). 12. Paramere, ventrolateral view. 13. Genital plates.

***Disderia parda*, new species**  
(Figs. 14-19)

*Description.* Dorsum dark yellowish brown; punctation black, on coria especially dense, on pronotum and scutellum disposed in part as irregular



Figs. 14-19. *D. parva*. 14. Head. 15. Pygophore, ventral view. 16. Genital cup; parameres (PA). 17. Aedeagus, everted, lateral view, ventral diverticulum (V. DIV.); median penial plates (M. P. P.); penisfilum (P.). 18. Aedeagus, uneverted, ventral view. 19. Parameres, ventral view.

rows with a general transverse orientation. Venter much paler; thoracic punctures of moderate size, mostly dark, irregularly distributed; abdominal punctures for most part progressively larger darker and less numerous from lateral abdominal margins toward meson. Length of body 7.8 to 8.1 mm.

Head 1.9 mm wide across eyes, 1.4 mm long. Three basal segments of antennae concolorous with venter, bearing numerous dark dots; ultimate two segments darker, immaculate; length of segments 0.5; 0.8 to 0.9; 0.9; 1.2; 2.0 mm. Pronotum 5.0 to 5.1 mm wide, 2.0 mm long at meson; anterolateral margins slightly convex; humeri rounded, scarcely produced. Scu-

tellum 3.1 mm wide at base, 3.5 to 3.6 mm long; basal disk darkened by diffusion of black about punctures. Coastal angle of coria reaching posterior margin of penultimate tergite; membrane of hemelytra darkly fumose, veins simple or furcate. Connexiva little to moderately exposed, black with pale marginal spot in middle of each segment.

Evaporative area large, each covering much of metapleuron and mesopleuron, matte, similar to remainder of pleura in color and punctation. Legs with fuscous dots, those on femora larger and less numerous than on tibiae; superior surface of all tibiae sulcate. Spiracular peritremes dark. Abdominal margins thinly edged in black except in middle of each segment.

Digitiform process on posterolateral angles of pygophore directed obliquely mesad (Figs. 15, 16); conspicuous impression in lateral pygophoral surface located outside of genital cup opposite apex of parameres. Parameres irregularly palmate from dorsal aspect; ventrolateral subapical surface covered with fine serrate ragae (Fig. 19). Median penial plates forming large concave area, heavily sclerotized and pigmented, with short penisfilum emerging within ventral margin; ventral conjunctival diverticulum increasingly sclerotized and pigmented toward apex, distally bifurcate, terminating on each side in hook (Fig. 17); most of conjunctiva and penisfilum retractable into theca, of pigmented parts leaving only distal part of ventral diverticulum exposed in deep ventral emargination of theca (Fig. 18).

*Holotype*. ♂, labeled (a) "Mexico, Oaxaca, 21.8 mi. n. Juchatengo. 7100' III, 23, 1966, in bromeliads" (b) "George E. Ball, D. R. Whitehead, collectors". Deposited in U.S. National Museum, type no. 75558.

*Paratype*. ♂, labeled as holotype, in author's collection.

*Discussion*. *Disderia* has no great likeness to any other genus, as both Bergroth (1910) and Ruckes (1959) remarked, and the intrageneric dissimilarities suggest that the relationship among species is not close.

Although the tibiae of *D. decorata* are asulcate and those of the other 2 species are sulcate, the external morphology other than the genitalia is consistent with expectations for congenericity. Both *D. decorata* and *D. ornata* have eversible conjunctiva, i.e., the conjunctiva and associated phallic structures are largely contained within the theca (Figs. 11, 18), from which they may be extracted manually and from which they are presumably everted during copulation (Figs. 10, 17). This does not seem to be the case in *D. ornata*.

There are notable differences among the 3 species in the conjunctival structures. *D. decorata* has a median, conical diverticulum that is posterior to a dome shaped expansion, a pair of lateral diverticula and a pair of ventral diverticula (Figs. 4-6). These are entirely membranous with the exception of the apex of each member of the ventral pair. Small median penial plates are present at the base of the penisfilum. Both *D. inornata* and *D. parda* have an elongated ventral diverticulum that bifurcates distally with each part terminating in a hook (Figs. 10, 17). The two species diverge sharply



in that *D. parda* has large median penial plates while *D. inornata* has none, and *D. inornata* has a pair of appendicular diverticula laterally which are not represented in *D. parda*.

The parameres of *D. ornata* and *D. parda* are distally flattened and essentially horizontal (Figs. 2, 3, 16, 19); those of *D. inornata* are distally hooked and essentially vertical (Figs. 9, 12).

Among females, the triangulum is exposed in *D. decorata* but not in *D. inornata* (Figs. 7, 13). The female of *D. parda* is unknown.

*Disderia* appears to be an old genus that exhibits a remarkable degree of divergence in the genitalia of the 3 species. The few species and the large interspecific differences are consistent with the assumption of generic antiquity. The spiracles on the 8th paratergites and 8th sternite retain the primitive character state. Eversible conjunctiva, as exhibited by *D. inornata* and *D. parda*, occurs infrequently among Pentatomini, but it is characteristic of several groups, e.g. the acanthosomatids, that are generally considered to be less recent phylogenetically than the Pentatomini.

#### KEY TO SPECIES OF *Disderia*

1. Tibiae asulcate; large white spot in each basal angle and at apex of scutellum, other white markings on body; little of pygophore evident from ventral view (Fig. 1) .....  
.....*D. decorata* (Distant)
- Tibiae sulcate; conspicuous pale markings confined to connexiva; pygophore prominent from ventral view (Figs. 8 and 15) ..... 2
2. Dorsum light brown, abdominal punctation nearly concolorous with sternites; length without membrane about 10 to 12 mm; posterolateral angles of pygophore deeply incised laterally, without digitiform process, parameres hook-shaped (Figs. 9, 12) .....  
.....*D. inornata* Ruckes
- Dorsum dark brown, abdominal punctation mostly much darker than sternites; length without membrane about 8 mm, posterolateral angles of pygophore not incised, each bearing slender digitiform process directed obliquely mesad; parameres irregularly palmate (Figs. 16, 19) .....*D. parda*, new species

#### ACKNOWLEDGMENT

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#### LITERATURE CITED

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